



2600 Bull Street
Columbia, SC 29201

TO: County Recycling Coordinators

FROM: Pete Stevens
Division of Mining and Solid Waste Management
Bureau of Land & Waste Management

RE: **FY04 South Carolina Solid Waste Management Progress Report**

DATE: June 25, 2004

Each year, the Department of Health and Environmental Control's Division of Mining and Solid Waste Management (Division) asks county representatives to complete a solid waste progress report based on the current fiscal year. This report provides solid waste officials with the most up-to-date information regarding solid waste management in our State.

In an effort to make it easier for county staff, this year's report has been streamlined and many questions from the previous year have been removed from the report. In addition, local governments are reminded that Division staff are available and will provide assistance upon request. You may contact Pete Stevens at 803.896.4149 or stevenpf@dhec.sc.gov.

To improve data accuracy and to accommodate planning strategies, county representatives are responsible for providing detailed recycling data and solid waste collection data. Division staff will gather disposal data information.

Annual progress reports are due to the Division no later than October 1, 2004.

County representatives are strongly urged to submit the progress report as soon as it is completed and not wait until the October 1, 2004, deadline to submit the county report. The Division is the regulatory entity responsible for enforcing the language in the Solid Waste Policy and Management Act. Failure to submit the required report by the deadline may result in compliance actions, which may affect the awarding of solid waste, used oil and tire grants.

The FY04 Progress Report

This year's progress report is available in MS Excel and MS Word. The progress report will be sent electronically to all county recycling coordinators, solid waste contacts, and county administrators with E-mail addresses. In addition, everyone will also receive a hard copy. The report should be completed only once and in the format most convenient for the person completing the progress report. Reports will be accepted electronically, by mail and by facsimile. The Division will make a hard copy from the county submittals for all reports submitted electronically. These files will be available for review through the Freedom of Information Office.

Those persons responsible for completing this report are strongly encouraged to review the information on Page 24, which provides examples of what should and should not be included as municipal solid waste. Last year, there were several instances of counties including tonnages that either did not fall under the U.S. Environmental Protection Agency's MSW definitions OR were materials that came from areas outside the actual county reporting. If you have concerns or questions about whether or not a material should be included or under which category it would fall, please contact Elizabeth Rosinski at 803.896.4238 or rosinsev@dhec.sc.gov.

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**FISCAL YEAR 2004
ANNUAL SOLID WASTE MANAGEMENT PROGRESS REPORT
JULY 1, 2003 THROUGH JUNE 30, 2004 (FY04)**

Please complete the solid waste survey and all applicable attachments for the county and **submit this report prior to October 1, 2004**, to the attention of Pete Stevens, SCDHEC Bureau of Land and Waste Management, Division of Mining and Solid Waste Management, 2600 Bull Street, Columbia, SC 29201. Submit by mail, facsimile 803.896.4001, or electronically to stevenpf@dhec.sc.gov

County Demographics and Information	
Q1 Provide the name of the reporting county:	
Q2 Provide information on the county contacts:	
County Administrator -Name:	
Title (change if different):	
Administrator's mailing address - street:	
Administrator's mailing address - city, state, zip:	
Administrator's area code and phone number:	
Administrator's fax number:	
Administrator's E-mail address (future correspondence may be done by E-mail):	
Recycling Coordinator (RC) - Name:	
Title (change if different):	
RC's mailing address - street:	
RC's mailing address - city, state, zip:	
RC's area code and phone number:	
RC's fax number:	
RC's E-mail (future correspondence may be done by E-mail):	
Solid Waste (SW) Contact - Name:	
Title (change if different):	
SW Contact's mailing address - street:	
SW Contact's mailing address - city, state, zip:	
SW Contact's area code and phone number:	
SW Contact's fax number:	
SW Contact's E-mail (future correspondence may be done by E-mail):	
Q3 Direct questions about the information in this report to whom?	
Name and title:	
Mailing address - street:	
Mailing address - city, state, zip:	
Phone number with area code:	
E-mail address (future correspondence may be done by E-mail, please provide):	
Send next year's progress report to whom (name/title)?	
Mailing address - street:	
Mailing address - city, state, zip:	
Phone number with area code:	

E-mail address (future correspondence may be done by E-mail, please provide):	
Q4 Does the county/region have any SW ordinances?	
Title and description:	
Title and description:	
Title and description:	
Q5 Population Data:	
Q6 How many tourists visited in FY04?	
Source of data:	
Industry Information	
Q7 How many new industries located in the county/region for FY04?	
Industry type and waste stream:	
Industry type and waste stream:	
Industry type and waste stream:	
Industry type and waste stream:	
Q8 Have any industries relocated out of county during FY04?	
Describe how loss affects SW management in the county/region:	
Q9 Have any significant land use changes occurred during FY04?	
Info regarding these changes:	
Info regarding these changes:	
Info regarding these changes:	
Info regarding these changes:	
Collection of MSW and Recyclables	
Q10 Green Box (GB) Sites Only:	
Actual number of green box sites:	
Number of households served by GBs:	
Q11 Staffed Drop-Off (DO) Convenience Centers (CC) Only:	
Number of households served by staffed DO/CCs:	
Number of staffed MSW only sites:	
Number of staffed recyclables only sites:	
Number of staffed MSW and recyclables sites:	
Calculated - Total number of staffed sites:	
Q12 Un-Staffed Drop-Off Convenience Centers Only:	
Number of households served by un-staffed DO/CCs:	
Number of un-staffed MSW only sites:	
Number of un-staffed recyclables only sites:	
Number of un-staffed MSW and recyclables sites:	
Calculated - Total number of un-staffed sites:	
Q13 Used Oil (UO) Only Collection Sites/Centers:	
Number of households served by staffed UO Only collection sites/centers:	
Number of staffed UO only sites:	
Number of un-staffed UO only sites:	
Calculated - Total number of UO only sites:	

UO Pick Up: Santee Cooper picks up used oil from most UO sites.	
If a different vendor picks up for county, list here:	
Q14 Curbside Collection Programs:	
Number of households served by MSW only curbside collection:	
Number of households served by recyclables only curbside collection:	
Number of households served by MSW & recyclables curbside collection:	
Total # of curbside programs offered in county (county/municipal sponsored, etc.):	
Names of municipalities providing curbside service:	
Special Wastes	
Q15 What special wastes are generated in county? Managed how?	
Enter information here:	
Continue to enter information here:	
Continue to enter information here:	
Continue to enter information here:	
Q16 Provide info on the management of special wastes received from out of county:	
Enter information here:	
Continue to enter information here:	
Continue to enter information here:	
Continue to enter information here:	
Tracking SW Disposal/Incineration/Exportation - Generated in County	
Q17 The current format for tracking each county's waste, from pick up to final destination.	
Please include additional sheets to respond.	
Having this information will identify where waste goes that is not disposed of in SC.	
[1] How is waste collected i.e. do you have pick up? Describe type of	
waste (MSW, C&D, etc.) and provide as much detail as possible.	
Now proceed to Q18, the State Recycling Table (next sheet)	

TRACKING RECYCLING EFFORTS

Q18. Using the table on the following page, please provide information on the total **tons** collected for recycling in your county during fiscal year 2004. Total tonnage should represent only the amount that was **generated** within the county/region (not imported).

Include all residential/county recycling efforts and the recycling efforts of all local governments; institutional and non-profit establishments (schools, colleges, universities, government agencies, fire departments, libraries, hospitals, prisons); commercial establishments (office buildings, retail/wholesale establishments, grocery stores, fast food, restaurants), and industries.

SOURCES OF MSW	TYPICAL EXAMPLES OF MSW
Residential (single- and multi-family homes).	Old newspapers, clothing, packaging, cans and bottles, food scraps, and yard waste.
Commercial (office buildings, retail and wholesale establishments, and restaurants).	Old corrugated containers (OCC), office papers, yard waste, food scraps, disposable tableware, paper napkins, and cans and bottles.
Institutional (schools, libraries, hospitals, and prisons).	Office papers, books, yard waste, and cafeteria wastes (food scraps, disposable tableware, paper napkins, and cans and bottles).
Industrial (packaging and administrative, but not process wastes *).	OCC, plastic film, wood pallets, office papers, and cafeteria wastes (food scraps, disposable tableware, paper napkins, and cans and bottles).
This table includes general descriptions and should be used only as a guide when trying to categorize the sources of MSW. This table is formatted after a combination of tables found in the EPA guide, Measuring Recycling: a Guide for State and Local Governments, and contains information as it relates to SC laws governing solid waste.	

Please do not enter data in any cells where 0.00 is already entered. Enter data in either the Excel table, the Word file, or submit a handwritten or typed report.

Please report all quantities in tons (1 ton = 2,000 pounds). Use the attached volume to weight conversion table to convert your data from cubic yards or other unit of measure into tons. Make all conversions BEFORE entering in table. For conversions used by the county that are not listed on the provided chart, please provide the conversion below, when it is used, and how the conversion was derived, if possible. Conversions provided may be shared with others. For example, if used oil is reported in gallons for some businesses and tons for other businesses, convert to common unit BEFORE adding figures together and then convert to tons BEFORE entering on the recycling table.

Definitions of all terms used in this mailing are described in the definitions section beginning on Page 25. Please refer to this section for definitions of categories provided on the table.

Industry's recycling efforts can impact heavily on the county's total recycling tonnages. For that reason, division staff will be verifying those figures as well as their source.

Q18 - County Recycling Table FY04	Residential	Commercial	Institutional	Industrial	* Industrial
	County		Nonprofit	Packaging	Preconsumer
Glass					
Brown					
Clear					
Green					
Mixed					
Metal - does not include white goods or auto bodies					
Aluminum (non-ferrous)					
Tin or steel (ferrous) cans					
Ferrous, magnetic - not tin or steel cans					
Nonferrous, nonmagnetic- lead, copper, aluminum containers					
Other or scrap (should not include white goods or auto bodies)					
Paper					
Cardboard					
Magazines					
Newspapers & Inserts					
White office paper and/or computer printouts (CPO)					
Mixed paper					
Telephone directories					
Other paper and/or paperboard					
Plastics					
1 PETE - polyethylene terephthalate					
2 HDPE - High density polyethylene					
2 HDPE - Used oil bottles if not included in 2 HDPE line above					
All bottle collection programs (1-2)					
3 V - vinyl					
4 LDPE - low density polyethelene					
5 PP - polypropylene					
6 PS - polystyrene					
Other Plastics: Incl. plastic resins other than those listed above, tubs, bottles, etc.					

County Recycling Table (cont.)	Residential	Commercial	Institutional	Industrial	* Industrial
	County		Nonprofit	Packaging	Preconsumer
Banned Items					
Lead acid batteries					
Automobiles, trucks and motorcycles; small sealed lead acid batteries					
* Aircraft, military vehicles, boats, heavy duty trucks and tractors					
Used oil					
* Used oil					
Waste tires					
Automobiles and trucks					
* Motorcycles, buses, heavy farm and construction equipment					
White goods					
White goods					
Yard trimmings and land clearing debris					
yard trimmings and land clearing debris if recycled into mulch					
yard trimmings and land clearing debris if recycled into compost					
Miscellaneous (could be disposed of in the MSW stream)					
Antifreeze					
Consumer electronics					
Cooking Oil					
Fluorescent tubes					
Food waste, post consumer only					
Household hazardous materials					
Latex paint					
Mattresses					
Used oil filters					
Textiles					
Textile, fiber from apparel, furniture, linens, carpets, rugs, footwear					
* Textile, reuse of apparel					
Wood					
Wood packaging (pallets, crates, barrels if recycled into mulch or similar use)					
Other wood (furniture, cabinets, consumer electronics & other nonpackaging wood products; excludes wood from C&D and industrial waste)					

County Recycling Table (cont.)	Residential	Commercial	Institutional	Industrial	* Industrial
	County		Nonprofit	Packaging	Preconsumer
* Other					
* Abatement debris - waste resulting from remediation activities					
* Agricultural waste generated by the rearing of animals					
* Automobile bodies					
* Combustion ash					
* Industrial sludge, composted					
* Industrial sludge, land applied					
* Municipal sewage sludge, composted					
* Municipal sewage sludge, land applied					
* For items not listed above, type in item(s) from each county					
* [1]					
* [2]					
* [3]					
* [4]					
* [5]					
* [6]					
* [7]					
* [8]					
* [9]					
* [10]					
* C&D Debris					
* Asphalt					
* Brick, block					
* Concrete					
* Gypsum drywall					
* Metal, steel					
* Natural disaster debris					
* Shingles					
* Wood scraps (clean, untreated lumber)					
* Other					
* All C&D, if not broken out above					

19. TRACKING SOLID WASTE DISPOSAL, INCINERATION AND THE EXPORTING OF SOLID WASTE

To accurately track waste from origin to site of disposal, the Division reviews solid waste disposal facility annual reports and transfer station data. These reports will be compared to the information provided below to make sure tonnages are correctly assigned to the county of origin. For your information, the types of permitted facilities are MSW landfills, MSW incinerators, land-clearing debris (LCD) incinerators, LCD landfills, C&D landfills, industrial landfills, transfer stations, and SW processing facilities, and the like.

In past years, counties were asked to complete facility sheets for the disposal facilities in the county then place this information in a disposal table. The current format for tracking each county's waste, from pick up to final destination, involves having the county provide a written description of waste management. Please include additional sheets to respond. Having this information will help the Division when reviewing annual reports submitted by the disposal facilities and, will identify where waste goes that is not disposed of in SC.

This description should include the following types of information:

Waste Generated in the County:

[1] How is waste collected i.e. do you have pick up?

Describe type of waste (MSW, C&D, etc.) and provide as much detail as possible.

[2] What is the name of the hauler, hauling company?

[3] Where is the waste hauled? Transfer station? Landfill? Incinerator?

Provide type (MSW, C&D, etc.) and as much detail as possible.

[4] If waste goes to a transfer station, where does it go from there? SC landfill, out of state?

Provide names and as much detail as possible.

NOTE: For those counties **exporting** any solid waste generated in the county, please provide tonnages of each waste stream in addition to the information above.

Written Description of Waste Collection to Disposal (Include additional sheets if needed).

The following survey is for DHEC's Office of SW Reduction & Recycling and the Recycling Market Development Advisory Council	
Note: this information is for recycling staff only and will not be included in your file	
How has reduced funding impacted your recycling program?	
List three materials you have difficulty finding markets for:	
How would you recommend recovering more single-serve beverage containers for recycling?	
What are the obstacles in your county for adopting a variable rate pricing or Pay As You Throw program?	
What is the interest level in your community for recycling the following items?	
Computers:	
Household hazardous waste:	
Wood waste:	
Commercial recycling:	
Fluorescent bulbs/lamps:	
List materials that have been added or removed from your county program	
Specify if added/removed and reasons for change	
Continue to enter here:	
Continue to enter here:	
Commodity revenue (this information will remain confidential)	
List materials recycled in your local program.	
Also list revenue information for each material, including price per unit (pounds or tons) and any requirements the vendor may have (baled, loose, minimum quantity)	
Continue to enter here:	
Continue to enter here:	
What percentage of all the following commodities are beverage containers?	
Glass:	
Metal (aluminum cans):	
Plastic:	

BUSINESS AND INDUSTRY

This section includes materials needed to reach out to area business and industry in an effort to obtain their waste reduction and recycling activities as well as to provide tools to those companies who aren't doing much in the way of waste reduction and recycling.

Included in this section is the following:

- Letter to County Solid Waste Officials from Karen Owens, manager of the Business Recycling Assistance Program (BRAP);
- Sample BRAP informational letter to business and industry;
- One each of BRAP brochure and FYI on Fluorescent Light Bulbs;
- Sample cover letter;
- Recycling table (modified for business and industry);
- Scope of materials & activities included in the definition of MSW & MSW Recycling;
- Volume to weight conversion table; and
- Troubleshooting table.

Information provided in this section should be used only as a guide for collecting and interpreting solid waste data. Other methods are acceptable and should be documented whenever possible.

Use the list of businesses that can be provided by the Recycling Market Development Advisory Council to identify some of the businesses in your area that may recycle. This list is incomplete. Please develop your own database of contacts to use from year to year. Refer to the troubleshooting table on Page 23 for suggestions on additional information you may want to include in your letter.



Dear County Solid Waste Official,

As manager of the Business Recycling Assistance Program, I just wanted to remind you that we are happy to work with you and businesses in your community to reduce the amount of waste they generate and dispose as well as identify opportunities for recycling. Since our group was established in 2001, we have helped a number of companies experience significant savings, both in the actual amount of garbage disposed of and avoided disposal costs.

We need your help to do better. If you have not worked with the business community to reduce waste and increase recycling, let me encourage you to do so as much of the waste generated in our state comes from the commercial and industrial sector. We have a variety of assistance tools that can help businesses implement reduction and recycling programs as well as the staff to go out and call on these companies to get them started.

You can help us by alerting them of our services. I've included a copy of our new brochure that is currently being printed and we can provide you with additional copies if you're interested in distributing them. Or better yet, you can send me a list of companies in your community that may benefit from our service and I can send them an introductory letter and brochure. I also make presentations and would be happy to host a workshop on the benefits of business recycling in your community.

We are also in the process of updating our "It's Everyone's Business: A How-To-Guide for Implementing Waste Reduction Programs for South Carolina Businesses" and that should be available by the end of the summer. Our Web site has a new look and I encourage you to check it out – www.scdhec.gov/brap.

I've also enclosed a fact sheet on mercury lamp recycling. As you may know, we've received a grant from the U.S. Environmental Protection Agency to promote recycling of fluorescent bulbs and other mercury containing lamps. If you are interested in setting up a collection program for mercury lamps in your county, please let me know. We may be able to provide you with some collection containers to get a program underway.

In closing, I just want to remind you that we have significant capacity for hauling, processing, manufacturing and marketing recycled materials in our state -- more than 20,000 people make their living in the recycling industry. As many communities grapple with job losses and outsourcing, we can help save S.C. jobs by growing our recycling collections. And B-RAP is here to help you do just that.

Thank you for your tireless efforts to monitor solid waste and recycling activities in your community and please feel free to contact me if our program can further assist your efforts!

Sincerely,

Karen Owens
Phone: 803-737-0239
Fax: 803-806-3455
Email: kowens@sccommerce.com



Dear Business Leader,

Are you tired of rising disposal costs? Ever thought about how much your company is spending to throw things away? Would you consider re-evaluating how you handle your waste if it could save you money?

The Business Recycling Assistance Program provides free waste management assistance to companies of all sizes to help them reduce the amount of waste they generate and dispose as well as identify opportunities for recycling.

Our partners have helped hundreds of companies as well as government agencies, military bases, hospitals, churches and other community organizations interested in reducing the amount of waste they pay to have disposed in South Carolina's landfills. In many cases, we've helped our clients save anywhere from 30 to 50 percent in just a matter of a few months.

How does it work? Members of our experienced team will visit your business to learn what types of waste are generated, walk through and look at your trash dumpsters, and then identify what materials can be diverted from your trash. We'll discuss opportunities for reducing what comes into your business, looking for materials that can be reused again and again, and determining what items can easily be recycled.

South Carolina is home to numerous companies that use recovered materials as a feedstock for their operations. Whether you have wooden pallets, cardboard boxes, office paper, metal containers or a variety of other materials, we can identify markets willing to take these materials.

We also have a How-To Guide for Businesses that walks you step-by-step through the process of putting a waste reduction and recycling program in place. This guidebook also has forms you can use to track your efforts and the best news is they are designed to coordinate with the annual tracking forms the county sends you each year requesting your solid waste information.

I have enclosed one of our brochures and encourage you to call today to set up your free waste assessment so you can begin saving money and reducing waste!

Sincerely,

Karen Owens
Manager
Business Recycling Assistance Program
Phone: 803-737-0239
Fax: 803-806-3455
Email: kowens@sccommerce.com

[Date]

[Contact Person's Name - person responsible for shipping/packaging, president/CEO]

[Name of Company - private hauler, business, industry, waste disposal facility, etc.]

[Street Address]

[City, State Zip]

RE: Reporting Recycling Efforts for [Business or County Name] {Optional or use a different subject}

Dear Mr./Ms. _____ or Dear Sir/Madam:

State law requires each county to annually collect and report data on all solid waste recycling, reduction and reuse activities that have taken place in the county for the previous fiscal year (July 1 through June 30). These reports provide crucial information necessary for measuring state recycling and reduction rates. Data collected helps the state identify recycling markets in need of expansion, gauge disposal capacity and make effective solid waste management decisions. Please return the enclosed/attached report/survey/form **no later than August __, 2004.**

The enclosed table/form includes all of the materials the county is required to track for reporting purposes. Some areas of the table/form may not apply to your business. Please complete the table/form in as much detail as possible. The county is required to report recycling information in tons. If you do not have information available in tonnages, please provide the unit of measure in the column provided. A conversion table has been provided for your review also.

If you are not the person responsible for generating the data needed, please forward to the appropriate person. We are also interested in streamlining our requests and would be happy to contact the appropriate person or regional office directly.

All information provided is treated confidentially and only tonnages (not business names) and county totals are reported to DHEC'. If you have any questions regarding the completion of this survey/form, please do not hesitate to contact [county contact person] at [phone number] or [E-mail address]. Thank you for your cooperation and, for taking the time to complete this survey. Your assistance is greatly appreciated and will enable _____ County to have a more accurate report regarding solid waste activities in the county.

Sincerely,

County Representative

Business Recycling Survey for Fiscal Year 2004 (July 1, 2003 – June 30, 2004)

To make sure information is not duplicated, please indicate if this data is for ☐ the facility/site located in the county, ☐ for all sites in SC, or ☐ for a particular region:_____.

If data is not available July 1 through June 30, please indicate dates used to generate your report:_____.

Business name (for county tracking purposes only):_____.

Type of business: Please check one:

☐ Residential, county/local government recycling program.

☐ Institutional or non-profit establishment (school, college, university, government agency, fire department, library, hospital, prison). Other establishment that fits in this category:_____.

☐ Commercial establishment (office building, retail/wholesale establishment, grocery store, fast food, restaurant). Other establishment that fits in this category:_____.

☐ Industry.

**** What is the difference between industrial packaging/administrative wastes and industrial pre-consumer process wastes?***

Pre-consumer process waste: A pre-consumer process waste is any material used in the manufacturing process or material/by-product resulting from processing that does not reach the intended end user of the product being manufactured, even if the by-product/material is put back into the manufacturing process, sold/sent off-site for use as-is or in another process, or re-used. Examples: When paper mills place the paper by-products back into the paper manufacturing process instead of discarding, the paper put back into the process is considered a pre-consumer process waste. When a chicken nugget manufacturer sells scrap chicken to a dog food company, the scrap chicken is considered a pre-consumer process waste.

Packaging administrative waste: In addition to traditional office recycling programs (aluminum, paper, cardboard, etc.), if a processor recycles the package a raw material comes in/on, the package is considered an industrial packaging/administrative waste. As a general rule, materials included in this category are those things that do not enter the manufacturing process. Examples: A textile company uses thread to make cloth. The thread comes on cardboard cones or spools. Once all of the thread on a spool is used, the spool is recycled. The spool is considered an industrial packaging/administrative waste. If the fluff from the thread is recycled by putting the fluff back into the manufacturing process, the fluff is considered a pre-consumer process waste.

Enter Figures for those that apply:	Unit of Measurement
Glass	
Brown	
Clear	
Green	
Mixed	
Metal - does not include white goods or auto bodies	
Aluminum (non-ferrous)	
Tin or steel (ferrous) cans	
Ferrous, magnetic - not tin or steel cans	
Nonferrous, nonmagnetic-lead, copper, aluminum containers	
Other or scrap (should not include white goods or auto bodies)	
Paper	
Cardboard	
Magazines	
Newspapers & Inserts	
White office paper and/or computer printouts (CPO)	
Mixed paper	
Telephone directories	
Other paper and/or paperboard	
Plastics	
1 PETE - polyethylene terephthalate	
2 HDPE - High density polyethylene	
2 HDPE - Used oil bottles if not included in 2 HDPE line above	
All bottle collection programs (1-2)	
3 V - vinyl	
4 LDPE - low density polyethelene	
5 PP - polypropylene	
6 PS - polystyrene	
Other Plastics: Incl. plastic resins other than those listed above, tubs, bottles, etc.	
Banned Items	
Lead acid batteries	
Automobiles, trucks and motorcycles; small sealed lead acid batteries	
* Aircraft, military vehicles, boats, heavy duty trucks and tractors	
Used oil	
* Used oil	
Waste tires	
Automobiles and trucks	
* Motorcycles, buses, heavy farm and construction equipment	
White goods	
White goods	
Yard trimmings and land clearing debris	
yard trimmings and land clearing debris if recycled into mulch	
yard trimmings and land clearing debris if recycled into compost	
Miscellaneous (could be disposed of in the MSW stream)	
Antifreeze	
Consumer electronics	

Cooking Oil	
Fluorescent tubes	
Food waste, post consumer only	
Household hazardous materials	
Latex paint	
Mattresses	
Used oil filters	
Textiles	
Textile, fiber from apparel, furniture, linens, carpets, rugs, footwear	
* Textile, reuse of apparel	
Wood	
Wood packaging (pallets, crates, barrels if recycled into mulch or similar use)	
Other wood (furniture, cabinets, consumer electronics & other nonpackaging wood products; excludes wood from C&D and industrial waste)	

* Other	
* Abatement debris - waste resulting from remediation activities	
* Agricultural waste generated by the rearing of animals	
* Automobile bodies	
* Combustion ash	
* Industrial sludge, composted	
* Industrial sludge, land applied	
* Municipal sewage sludge, composted	
* Municipal sewage sludge, land applied	
* For items not listed above, type in item(s) from each county	
* [1]	
* [2]	
* [3]	
* [4]	
* [5]	
* [6]	
* [7]	
* [8]	
* [9]	
* [10]	
* C&D Debris	
* Asphalt	
* Brick, block	
* Concrete	
* Gypsum drywall	
* Metal, steel	
* Natural disaster debris	
* Shingles	
* Wood scraps (clean, untreated lumber)	
* Other	
* All C&D, if not broken out above	

Scope of Materials and Activities Included in the Definition of MSW and MSW Recycling

This table includes general descriptions of materials and activities considered MSW and MSW recycling and should be used only as a guide when trying to categorize materials and recycling activities. This table is formatted after a combination of tables found in the EPA guide, *Measuring Recycling: a Guide for State and Local Governments* and contains information as it relates to SC laws governing solid waste.

Recyclable Material	What is MSW	What Is NOT MSW	What Counts as Recycling	What does NOT Count as Recycling
Composite materials are categorized according to their main constituents; however, they can be designated as a separate category under Other MSW if they cannot be categorized otherwise. A waste is not considered MSW for various reasons: it is not included in the definition of MSW according to the Act; historically, has not been handled and disposed of as MSW; generated by a preconsumer source; regulated as a hazardous waste; and/or is not defined as MSW by EPA's <u>Characterization of MSW in the US</u> . Similarly, an activity is not considered recycling for various reasons: involves the recycling of materials that are not part of MSW; involves reuse or source reduction; involves the recycling of preconsumer waste; and /or is not defined as recycling in EPA's <u>Characterization of MSW in the US</u> .				
Food Scraps	Uneaten food and food preparation wastes from residences and commercial establishments (restaurants, supermarkets, and produce stands), institutional sources (school cafeterias), and industrial sources (employee lunchrooms).	Food processing waste from agricultural and industrial operations.	Composting of food scraps from grocery stores, restaurants, cafeterias, lunchrooms, and private residences, and the use of food scraps to feed farm animals.	Backyard (onsite) composting of food scraps, and the use of food items for human consumption (food banks).
Glass Containers	Containers; packaging; and glass found in appliances, furniture, and consumer electronics.	Glass from transportation equipment (automobiles) and C&D debris (windows).	Recycling of container and packaging glass (beverage and food containers), and recycling of glass found in furniture, appliances, and consumer electronics into new glass products such as containers, packaging, construction materials (aggregate), or fiberglass (insulation).	Recycling of glass found in transportation equipment and C&D debris, recycling pf preconsumer glass or glass from industrial processes, and reuse of refillable glass bottles.
Lead-Acid (LA) Batteries	Batteries from automobiles, trucks, and motorcycles.	Batteries from aircraft, military vehicles, boats, heavy-duty trucks and tractors.	Recycling of LA batteries found in cars, trucks, or motorcycles into new plastic and lead products.	Recycling of LA batteries used in large equipment, aircraft, military vehicles, boats, heavy-duty trucks and tractors, and industrial applications.
Metals Tin/Steel Cans and Other Ferrous Metals	Aluminum cans; nonferrous metals from appliances, furniture, and consumer electronics; and other aluminum items (foil and lids from bi-metal cans).	Nonferrous metals from industrial applications and C&D debris (aluminum siding, wiring, and piping).	Recycling of aluminum and tin/steel cans, and recycling of metals found in appliances and packaging into new metal products.	Reuse of metal containers, packaging, furniture, or consumer electronics, and recycling of metals found in transportation equipment (auto bodies) and C&D debris.

Paper	Old corrugated containers; old magazines; old newspapers; office papers; telephone directories; and other paper products including books, third-class mail, commercial printing, paper towels, and paper plates and cups.	Paper manufacturing wastes (mill broke) and converting scrap not recovered for recycling.	Recycling of paper products (old newspapers and office papers) into new paper products (tissue, paperboard, hydromulch, animal bedding, or insulation materials).	Reuse of paper products, recycling of preconsumer or manufacturing waste (waste, mill broke, print overruns, and over issue publications), and combustion of paper for energy recovery.
Plastic	Containers; packaging, bags and wraps; and plastics found in appliances, furniture, and sporting and recreational equipment.	Plastics from transportation equipment.	Recycling of plastic products (containers, bags, and wraps), and recycling of plastic from furniture and consumer electronics into new plastic products (fiber fill and plastic lumber).	Reuse of plastic products (storage containers and sporting equipment), recycling of preconsumer plastic waste or industrial process waste, and combustion of plastics for energy recovery.
Textiles	Fiber from apparel, furniture, linens (sheets and towels), carpets and rugs, and footwear.	Textile waste generated during manufacturing processes (mill scrap) and C&D projects.	Recycling of textiles into wiper rags, and recycling of apparel and carpet fiber into new products such as linen paper or carpet padding.	Reuse of apparel.
Carpeting is categorized as textiles when discarded in MSW and is included in calculating the MSW recycling rate. When carpets are discarded in C&D debris, they are not considered MSW and are excluded from the MSW recycling rate calculation.				
Tires	Tires from automobiles and trucks.	Tires from motorcycles, buses, and heavy farm and construction equipment.	Recycling automobile and truck tires into new products containing rubber (trash cans, storage containers, and rubberized asphalt), and use of whole tires for playground and reef construction.	Recycling of tires from motorcycles, buses, and heavy farm and construction equipment, and re-treading tires.
Tires from motorcycles are not defined as MSW because they historically have not been characterized as MSW.				
Wood	Pallets; crates; barrels; and wood found in furniture and consumer electronics.	Wood from C&D debris (lumber and tree stumps) and industrial process waste (shavings and sawdust).	Recycling of wood products (pallets and crates) into mulch, compost, or similar uses.	Repair and reuse of pallets, combustion of wood for energy recovery, recycling of industrial process waste (wood shavings or sawdust), and recycling of wood from C&D debris.

Tree stumps are categorized as yard waste when discarded in MSW and are included in the MSW recycling rate. When tree stumps are discarded in C&D debris, they are not considered MSW and are excluded from the MSW recycling rate calculation.

Yard Waste	Grass, leaves, brush, and branches, and tree stumps.	Yard waste from C&D debris.	Offsite recycling of grass, leaves, woody material such as brush, branches, whole trees and Christmas trees; and tree stumps into mulch, or similar uses; and land spreading of leaves.	Mulching of tree stumps from C&D debris, backyard (onsite) composting, grasscycling, land spreading of leaves, and combustion of yard waste for energy recovery.
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Tree stumps are categorized as yard waste when discarded in MSW and are included in the MSW recycling rate. When tree stumps are discarded in C&D debris, they are not considered MSW and are excluded from the MSW recycling rate calculation. Land spreading of leaves counts as recycling if the manner of the application allows timely biodegradation of the organic plant material. Land spreading of leaves does not count as recycling if the manner of the application precludes the timely biodegradation of the organic plant material.

Other	Household hazardous materials (HHM), oil filters, fluorescent tubes, mattresses, and consumer electronics.	Abatement debris, agricultural waste, combustion ash, C&D debris, industrial process waste, medical waste, mining waste, municipal sewage and industrial sludge, natural disaster debris, used motor oil, oil and gas waste, and preconsumer waste.	Household hazardous materials (HHM), oil filters, fluorescent tubes, mattresses, and consumer electronics.	Recycling of used oil, C&D debris (asphalt, concrete, and natural disaster debris), transportation equipment (auto bodies), municipal sewage sludge, and agricultural, industrial, mining, and food processing waste.
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HHM includes paints, stains, varnished, solvents, pesticides, and other materials or products containing volatile chemicals that catch fire, react, explode under certain circumstances, or that are corrosive or toxic. Specific examples include oil-based paint, antifreeze, household cleansers, and bug sprays. Used motor oil is excluded. Fluorescent tubes are categorized as Other MSW when discarded in MSW and are included in the MSW recycling rate calculation. Natural disasters included earthquakes, floods, hurricanes, and tornados. Heavy storms are not considered natural disasters.

STANDARD VOLUME-TO-WEIGHT CONVERSION FACTORS

Except for the C&D conversion, these conversions are provided as written in the EPA guide, Measuring Recycling: A Guide for State and Local Governments. If other conversions are used, please provide the Department with information regarding these.

Category	Recyclable Materials (uncompacted, compacted & baled)	Volume	Estimated Weight (in pounds)	Your Notes
Food Scraps	Food scraps, solid and liquid fats	55 gal drum	412	
Glass	Bottles: Whole Semi crushed Crushed (mechanically) Uncrushed to manually broken Refillable Whole Bottles: Refillable beer bottles Refillable soft drink bottles 8 oz glass container	1 yd ³ 1 yd ³ 1 yd ³ 55 gal drum 1 case=24 bottles 1 case=24 bottles 1 case=24 bottles	500-700 1,000-1,800 1,800-2,700 300 10-14 12-22 12	
Lead Acid (LA) Batteries	Car Truck Motorcycle	1 battery 1 battery 1 battery	39.4 lb 53.3 lb lead & plastic 9.5 lb lead & plastic	
Metals	Aluminum Cans: Whole Compacted (manually) Uncompacted Ferrous (tin coated steel cans): Whole Flattened Major Appliances: Air conditioners (room) Dishwashers Dryers (clothes) Freezers Microwave ovens Ranges Refrigerators Washers (clothes) Water heaters	1 yd ³ 1 yd ³ 1 full grocery bag 1 yd ³ 1 yd ³ 1 case=24 cans 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	50-75 250-430 1.5 0.9 150 850 22 64.2 92 130 193 50 181.1 267 177 131	

Oil filters uncrushed	55 gallon drum holds	250	328 lb	
Oil filters crushed	55 gallon drum-holds	750	984 lb	
Oil filters		1 filter	1lb 5 ounces	
Oil		1 gallon	7.2 lb	
Antifreeze		1 gallon	8	Close to the weight of water.
Car Bodies	With Wheels: Small car Medium car Large car	1 car 1 car 1 car	2,000 2,500 – 2,700 3,000 – 3,500	
Fluorescent Tubes	T12 Lamps, standard 8 ft 4 ft 18 in T8 Lamps (usually 1.5 oz lighter than the T12 equivalent), slimmer, smaller 8 ft 4 ft 55 gallon drum, u/c 55 gallon drum with a crusher	1 lamp 1 lamp 1 lamp 1 lamp 1 lamp 1 drum 1 drum	22 ounces 10.1 ounces 2.5 ounces 18.5 ounces 8.5 ounces 250 – 400+, depending on size of the pieces 400 and over	
Please note: Handling of broken or dropped fluorescent tubes requires special handling.				

Troubleshooting Potential Data Collection Problems to Ensure a High Response Rate

Obtain data on municipal programs from cities and counties. Contact nonprofits and private recyclers for additional data.

Survey data as close to the point of collection as possible to ensure accuracy. Also, try collecting recycling information from recycling plants, which tend to be less reluctant to share tonnage information than other sources.

Cross check collection figures with data from processing facilities and end users if necessary.

Address confidentiality concerns. Avoid asking for customer lists on survey forms and in letters requesting information. Also explain that information submitted is used to calculate tonnages and is only released for publication by county, not facility name. Provide a copy of one of the annual reports as an example.

When raw data is not available, estimations are acceptable, providing the estimates are based on good, solid knowledge of the sources of MSW and the flow of MSW in the area.

Other Considerations:

Send businesses a reporting form or survey along with a cover letter and return envelope. Include a deadline.

Contacts: Begin with the person responsible for arranging for disposal of wastes and packaging.

Create a database of business/industry contacts once you find out who actually completes your request. Allow enough time for a response and to compile all data.

If data is not available by fiscal year, collect data by quarters or calendar year. Ask industry if the report submitted is for your county, a region or for all sites in the state to eliminate duplicate reporting.

Contact the local chamber of commerce, economic development department for lists of businesses/industries in your area.

Waste audits (identifying a company's waste stream) are available from DHEC's Center for Waste Minimization. Copy the flyer for interested businesses. Businesses interested in starting a recycling program should contact the Department for additional information.

To track solid waste recycling/disposal, companies sometimes have to provide information that may be considered confidential or proprietary. Once information is submitted to the county, only totals are sent to the Department. Only totals for the county and state are published in the state's annual report.

Surveys are due to the Department by October 1 of each year.

RESOURCES, TABLES & OTHER REFERENCES

Information provided in this section should be used only as a guide for collecting and interpreting solid waste data. Others methods are acceptable and should be documented whenever possible.

Defining MSW and Measuring Solid Waste Activities:

The annual solid waste management survey is designed to help local and state officials capture solid waste data and measure solid waste activities using standardized methods. Some of these methods have originated from work done by EPA and published in the EPA guide, *Measuring Recycling, A Guide for State and Local Governments*. While used in part as a template for developing the tools South Carolina currently uses to measure solid waste reduction and recycling, there are differences between how EPA and South Carolina define certain solid waste terms and measure solid waste activities.

The Solid Waste Policy and Management Act of 1991 (the Act) is the state law governing solid waste management. The Act sets solid waste reduction and recycling goals and establishes reporting requirements for the state and each county or region. To measure whether or not the state is achieving these goals, the Department is required to compile a comprehensive report on solid waste management across the state. This report is submitted to the Governor and General Assembly by March 15 of each year. This report is based on the fiscal year July 1 through June 30. Counties and regions are required to report solid waste activities to the Department also. Information submitted is used to compile the state's solid waste report and is critical to the completion of the state's solid waste report.

The Act was amended October 3, 2000 and changed the way South Carolina measures solid waste reduction and recycling. Several changes were made to the Act as a result of the amendments, including the addition of a definition of municipal solid waste (MSW).

Municipal solid waste (MSW) is defined in the Act as wastes that are durable goods, nondurable goods, containers and packaging, food scraps, yard waste, and miscellaneous inorganic wastes from residential, commercial, institutional, and industrial sources including but not limited to, appliances, automobile tires, old newspapers, clothing, disposable tableware, office and classroom paper, wood pallets, and cafeteria wastes. MSW does not include solid wastes from other sources including but not limited to, construction and demolition debris, auto bodies, municipal sludge, combustion ash, and industrial process wastes that also might be disposed of in MSW landfills and incinerators.

To maximize reduction, it is South Carolina's goal to reduce on a statewide per capita basis, the amount of municipal solid waste (MSW) being generated to 3.5 pounds per day by June 30, 2005. How does South Carolina determine the total pounds of MSW generated per person, per day? Using disposal data from the MSW landfills and MSW incinerators, the total amount of MSW disposed or incinerated is calculated. Solid waste reduction is based on the amount of MSW that would have been disposed or incinerated only. Thus, the amount of MSW generated for this equation does not include imported waste or waste that has been recycled. Next, the total amount of MSW disposed/incinerated is converted from tons to pounds, if necessary. One ton equals 2,000 pounds. Once converted to pounds, the total amount of MSW disposed/incinerated is divided by 365 days to determine the total pounds of MSW generated per day. This number is then divided by the state's population to determine the total pounds of MSW generated per person, per day. The county's per capita MSW generation rate is derived by using county disposal and population data in this same equation.

It is South Carolina's goal to recycle, on a statewide basis, at least thirty-five percent (35%), calculated by weight, of the municipal solid waste stream generated in this state, no later than June 30, 2005. How much MSW has to be recycled to meet the recycling goal? To begin with, the total amount of MSW disposed or incinerated is calculated using MSW landfill and MSW incinerator data, as described above. The total MSW generated for the recycling formula does not include imported waste either but does include the amount of MSW recycled. Next, the amount of MSW recycled is added to the amount of MSW disposed/incinerated at the MSW landfills and MSW incinerators to calculate the total amount of MSW generated for this equation. To determine what amount of the MSW generated that would have to be recycled to meet the 35% recycling goal, multiply this total MSW generated number by 0.35. Finally, how much MSW is actually recycled? Divide the amount of MSW recycled by the amount of MSW generated then multiply by 100.

How South Carolina measures solid waste reduction and recycling is very similar to how EPA measures these efforts. However, there are notable differences. For example, South Carolina considers refuse derived fuel (waste-to-energy) a form of recycling while EPA does not identify combustion (for example, waste tires chipped for energy recovery) as recycling. While information from EPA's guide, *Measuring Recycling: a Guide for State and Local Governments*, is referenced frequently in the following text and tables, SC is bound by the language in the Act and, thus, interpretations of all references provided are based on SC law as stated in the Act.

SOLID WASTE DEFINITIONS

The following definitions are from the EPA guide, *Measuring Recycling: A Guide for State and Local Governments*. Some of the terms were developed specifically for the EPA guide to be used with EPA's reporting surveys and worksheets. These terms are included here since they are relevant to understanding solid waste and solid waste reporting in general. Other solid waste terms listed are not relevant to the completion of this survey but are provided for your information.

Abatement Debris: waste resulting from remediation activities.

Agricultural Waste: solid waste generated by the rearing of animals or the production and harvest of crops or trees.

Aluminum Cans: containers and packaging such as beverage cans or food and other nonfood cans. Examples of recycling include processing cans into new aluminum products (containers or foil).

Backyard Composting: the diversion of food scraps and yard waste from the municipal waste stream through the onsite controlled decomposition of organic matter by micro-organisms (mainly bacteria and fungi) into a humus-like product. Backyard composting is *excluded* from recycling activities and is considered source reduction because the composted materials never enter the municipal solid waste stream.

Broker: an individual or group of individuals who act as an agent or intermediary between the sellers and buyers of recyclable materials.

Brush and Branches: the natural woody material collected from yard waste. Whole trees, such as Christmas trees, are included. *Excludes* leaves and grass. Examples of recycling include processing brush and branches into compost additive or mulch.

Bulky Waste: those items that are large enough to warrant special collection services separate from regular residential curbside collection. Examples include major appliances and furniture.

Buy-Back Center: a facility where individuals or groups of individuals exchange recyclables for payment.

Collector: public or private haulers that collect non-hazardous waste and recyclable materials from residential, commercial, institutional, and industrial sources. **See Hauler.**

Combustion Ash: residual substance produced during the burning, combustion, or oxidation of waste materials.

Commercial Waste: waste generated by businesses, such as office buildings; retail and wholesale establishments; and restaurants. Examples include old corrugated containers, food scraps, office papers, disposable tableware, paper napkins, and yard waste.

Commingled Recyclables: a mixture of several recyclable materials in one container.

Composting Facility: offsite facility where the organic component of municipal solid scraps is biologically decomposed under controlled conditions; an aerobic process in which organic materials are ground or shredded and then decomposed to humus in windrow piles or in mechanical digesters, drums, or similar enclosures.

Computer Paper/Printout: a type of paper used in manifold business forms and produced in rolls and/or fan folded. Used with computers and word processors to print data, information, letters, etc.

Construction & Demolition (C&D) Debris: waste that is generated during construction, remodeling, repair, or demolition of buildings, bridges, pavements, and other structures. C&D debris includes concrete, asphalt,

lumber, steel girders, steel rods, wiring, dry wall, carpets, window glass, metal and plastic piping, tree stumps, soil, and other miscellaneous items related to the activities listed. Also includes natural disaster debris.

Crumb Rubber: ground rubber pieces the size of sand or silt used in rubber or plastic products, or processed further into reclaimed rubber or asphalt products.

Disposal Facilities: repositories for solid waste including landfills and combustors intended for permanent containment or destruction of waste materials. *Excludes* transfer stations and composting facilities.

Drop-Off Center: method of collection whereby recyclable or compostable materials are taken by individuals to a collection site and placed in designated containers.

End User: facilities that purchase or secure recovered materials for the purpose of recycling. Examples include recycling plants and composting facilities. *Excludes* waste disposal facilities.

Exports: MSW and recyclables that are transported outside the state or locality where they originated.

Ferrous Metals: magnetic metals derived from iron (steel). Products made from ferrous metals include major and small appliances, furniture, and containers and packaging (steel drums and barrels). Examples of recycling include processing tin/steel cans, strapping, ferrous metals from appliances into new products.

Food Processing Waste: food residues produced during agricultural and industrial operations.

Food Scraps: uneaten food and food preparation waste from residences and commercial establishments (grocery stores, restaurants, and produce stands), institutional sources (school cafeterias), and industrial sources (employee lunchrooms). *Excludes* food processing waste from agricultural and industrial operations. Examples of recycling include composting and using food scraps to feed pigs (CHECK THIS), but *excludes* source reduction activities such as backyard (onsite) composting and use of food items for human consumption (food banks).

Generators: producers of municipal solid waste such as residences, institutions, commercial businesses, and industry.

Glass Benefication Plant: glass processing facility where recovered glass cullet is cleaned of contaminants and processed into a form that is ready to be manufactured into a new product (mill-ready).

Glass Containers: containers and packaging such as beer and soft drink bottles, wine and liquor bottles, and bottles and jars for food, cosmetics, and other products. For the purpose of recycling, container glass is generally separated by color (clear, green, and amber or brown). Examples of recycling include processing glass into new containers, construction materials (aggregate), or fiberglass (insulation).

Grass: lawn clippings. *Excludes* leaves, brush and branches.

Grasscycling: a source reduction activity whereby grass clippings are left on the lawn after mowing.

Hauler: a waste collection company that provides complete refuse removal services. Many will also collect recyclables. Includes both private and public entities. **See Collector.**

HDPE (High Density Polyethylene): #2 plastics. A plastic product in which the ethylene molecules are linked in long chains with a few side branches. Examples of products made from HDPE include milk jugs, detergent bottles, margarine tubs, and garbage containers.

Household Hazardous Materials (HHM) - EPA refers to HHW, household hazardous waste: hazardous products that are used and disposed of by residential – rather than industrial – consumers. These

products include some paints, stains, varnishes, solvents, and pesticides, and other materials or products containing volatile chemicals that catch fire, react, explode under certain circumstances, or that are corrosive or toxic. HHM is derived from municipal solid waste with the exception of used oil, which is *excluded* from the category of MSW. Examples of recycling include processing HHM components into new products after they have been diverted from the waste stream. Diversion from the waste stream only does not constitute recycling (i.e. through collection programs).

Imports: MSW and recyclables that have been transported to a state or locality for processing or final disposition, but did not originate in that state.

Incinerator: a furnace for burning solid waste under controlled circumstances.

Industrial Process Waste: residues produced during manufacturing operations.

Industrial Sludge: the semi liquid residue remaining from the treatment of industrial water and wastewater.

Industrial Waste: non-hazardous wastes discarded at industrial sites from packaging and administrative sources. Examples include corrugated boxes, plastic film, wood pallets, lunchroom wastes, and office paper. *Excludes* industrial process wastes from manufacturing operations.

Institutional Waste: waste generated at institutions, such as schools, libraries, hospitals, and prisons. Examples include cafeteria and restroom trashcan wastes, office papers, classroom wastes, and yard waste.

Large Appliances: see **Major Appliances**.

Large Generator: commercial businesses, institutions, or industries that generate sufficient quantities of MSW and recyclables to warrant self-management of these materials. Examples of large generators include supermarkets, restaurants, hardware stores, shopping malls, warehouses, amusement parks, convention centers, and office and apartment complexes.

LDPE (Low Density Polyethylene): #4 plastics. A plastic material in which the ethylene molecules are linked in random fashion with the main chains of the polymer having long and short side branches. LDPE is used for both rigid containers and plastic applications.

Lead-Acid (LA) Batteries: batteries used in automobiles, trucks, and motorcycles. They contain plastic, lead (a toxic metal), and sulfuric acid. *Excludes* lead-acid batteries from large equipment, heavy-duty trucks and tractors, aircraft, military vehicles, and boats.

Leaves: the foliage of a plant. *Excludes* brush, branches, and grass.

Major (Large) Appliances: refers to many different types, sizes, and styles of ovens, microwave ovens, air-conditioners, refrigerators, freezers, washers, dryers, dishwashers, water heaters, dehumidifiers, or trash compactors manufactured for household, commercial, or recreational use. Steel is the predominant material used in the manufacture of large appliances. Other materials found in appliances (in varying amounts) include copper, brass, aluminum, glass, rubber, and paperboard. **See white**

Goods and Bulky Waste also.

Material Recovery Facility (MRF): a facility where recyclables are sorted into specific categories and processed, or transported to processors, for remanufacturing.

Medical Waste: any solid waste generated in the diagnosis, treatment, or immunization of humans or animals, in research pertaining to humans or animals, or in the production or testing of biologicals,

excluding hazardous waste identified or listed under 40 CFR Part 261 or any household waste defined in 40 CFR Subsection 261.4 (b)(1).

Mill-Ready Cullet: crushed and whole contaminant-free scrap container glass that complies with the proper Institute of Scrap Recycling Industries, Inc. glass specifications.

Mining Waste: residues resulting from the extraction of raw materials from the earth.

Minor Appliances: see **Small Appliances**.

Mixed Glass: recovered container glass that is not sorted by categories (color and grade).

Mixed Municipal Solid Waste: MSW that is not sorted into specific categories (plastics, glass, yard waste, etc.).

Mixed Paper: recovered paper that is not sorted by categories (old magazines, old newspapers, and old corrugated containers).

Mixed Plastic: recovered plastic that is not sorted into specific categories (#1s, #2s, etc.).

Mulching: the process by which the volume of organic waste is reduced through shredding or grinding.

Municipal Sludge: the semi liquid residue remaining from the treatment of municipal water and waste water.

Municipal Solid Waste (MSW): see definition on page 4.

Natural Disaster Debris: wastes resulting from earthquakes, floods, hurricanes, tornados, and other natural disasters. *Excludes* wastes resulting from heavy storms. Natural disaster debris is classified as C&D debris.

Nonferrous Metals: nonmagnetic metals such as aluminum, lead, and copper. Products made from nonferrous metals include containers and packaging such as beverage cans, food and other nonfood cans; nonferrous metals found in appliances, furniture, electronic equipment; and nonpackaging aluminum products (foil, closures, and lids from bimetal cans). *Excludes* lead-acid batteries and nonferrous metals from industrial applications and C&D debris.

Non-hazardous Industrial Process Waste: waste that is neither MSW nor considered a hazardous waste under Subtitle C of the Resource Conservation and Recovery Act, such as certain types of manufacturing wastes and wastewaters.

Office Paper: high-grade papers such as copier paper, computer printout, and stationary. These papers are almost entirely made of uncoated chemical pulp, although some amounts of groundwood are used. Note that this category of paper is also generated at locations other than offices, such as homes and institutions (schools).

Old Corrugated Containers (OCC): corrugated containers made from unbleached, unwaxed paper with a ruffled (corrugated) inner liner.

Old Magazines: dry, coated magazines, catalogs, and similar printed materials.

Old Newspaper: periodical printed on newsprint. Includes groundwood inserts (advertisements). Examples of recycling include processing old newspapers into new paper products (newspaper, paperboard, boxboard, or animal bedding).

Other Ferrous Metals: ferrous metals from strapping, furniture, and metal found in tires and consumer electronics. *Excludes* large quantities of metals found in construction materials or transportation products, such as automobiles, locomotives, and ships.

Other Glass: glass from furniture, appliances, and consumer electronics. *Excludes* glass from transportation products and C&D debris. Examples of recycling include processing glass into new glass products such as containers, construction materials (aggregate), or fiberglass (insulation).

Other Nonferrous Metals: nonferrous metals lead, copper, and zinc) from appliances, consumer electronics, and nonpackaging aluminum products (foil, closures, and aluminum lids from bimetal cans). *Excludes* nonferrous metals from industrial applications and C&D debris.

Other Paper: paper from books, third class mail, other commercial printing, paper towels, paper plates and cups, other nonpackaging paper (posters, photographic papers, cards, and games), milk cartons, folding boxes (cereal), bags, wrapping papers, and other paper and paperboard products.

Other plastic: plastic from appliances, furniture, trash bags, cups, eating utensils, sporting and recreational equipment, and other nonpackaging plastic products.

Other Recyclables: household hazardous waste, oil filters, fluorescent tubes, mattresses, consumer electronics, circuit boards, and other miscellaneous recyclable items found in MSW that cannot be otherwise categorized.

Other Solid Waste: non-hazardous solid wastes, other than MSW, covered under Subtitle D of the Resource Conservation and Recovery Act, such as municipal sludge, industrial non-hazardous waste, C&D waste, agricultural waste, oil and gas waste, and mining waste.

Other Wood: wood from furniture, cabinets from consumer electronics, and other nonpackaging wood products. *Excludes* wood recovered from C&D activities (lumber and tree stumps) and industrial process waste (shavings and sawdust). Examples of recycling include processing wood into mulch, compost additive, or animal bedding.

Overissue Publications (Overissues): printed publications, such as newspapers and magazines, which are defined as unsold inventory by the publisher. Overissues are not considered postconsumer waste.

Pallet: a portable platform made of wood or plastic lumber used for storing or moving cargo or freight. Pallets from an industrial site are an industrial waste and pallets resulting from construction activities are C&D waste.

Paper: paper products and materials such as old newspapers, old magazines, office papers, telephone directories, old corrugated containers, bags, and some paperboard packaging. Examples of recycling include (tissue, paperboard, hydromulch, animal bedding, or insulation materials).

Paper Processor: an intermediate operating facility where recovered paper products and materials are sorted, cleaned of contaminants and prepared for final recycling. Examples include paper stock dealers and paper packers.

PETE (Polyethylene Terephthalate): #1 plastics. A thermoplastic material used to manufacture plastic soft drink containers and rigid containers. PETE has a high melting point, is clear in its natural state and has a relatively high density.

Plastic: plastic containers and packaging made from various resins, including PETE, HDPE, PVC, LDPE, PP, and PS. *Excludes* plastics in transportation (automobiles) and construction products (PVC piping).

Plastic Processor: an intermediate operating facility where recovered plastic products and materials are sorted, cleaned of contaminants, and prepared for final recycling. Examples include plastics handlers and plastics reclaimers.

Plastics Handler: companies that prepare recyclable plastics by sorting, baling, shredding, granulating, and/or storing plastics until a sufficient quantity is on hand.

Plastics Reclaimer: companies that further process plastics after the handling stage by performing at least one of the following functions: washing/cleaning, palletizing, or producing a new product.

Post-consumer Materials/Waste: recovered materials that have been used as a consumer item and are diverted from MSW for the purpose of collection, recycling, and disposition (aluminum beverage cans, plastic bottles, old newspapers, and yard waste). *Excludes* materials from industrial processes that have not reached the consumer, such as glass broken in the manufacturing process or overissues of newspapers and magazines.

PP (Polypropylene): #5 plastics. A plastic polymer formed by linking propylene molecules. PP has good resistance to heat and is used in flexible and rigid packaging, film, and textiles.

Pre-consumer Materials/Waste: materials generated in manufacturing and converting processes, such as manufacturing scrap and trimmings/cuttings. Also includes print overruns, overissue publications (newspapers and magazines), and obsolete inventories.

Print Overruns: a quantity of paper that is printed beyond the quantity specified.

Processors: intermediate operators that handle recyclable materials from collectors and generators for the purpose of preparing materials for recycling (material recovery facilities, scrap metal yards, paper dealers, and glass beneficiation plants). Processors act as intermediaries between collectors and end users of recovered materials.

PS (Polystyrene): #6 plastics. A plastic polymer formed by linking styrene molecules. PS is used to make a variety of products including plastic cutlery and food containers. Often used in its foam state.

PVC (Polyvinyl Chloride): #3 plastics. The family of plastic copolymers known as vinyl. PVC is used to make pipes, bottles, upholstery, and automotive parts.

Recovery: the diversion of materials from the MSW stream for the purpose of recycling or composting. *Excludes* reuse and source reduction activities such as yard waste diverted to backyard (onsite) composting, the repair of wood pallets, and the refilling of beverage containers.

Recyclables: those materials recovered from the solid waste stream and transported to a processor or end user for recycling.

Recycling: the series of activities by which discarded materials are collected, sorted, processed, and converted into raw materials and used in the production of new products. South Carolina includes the use of these materials as a fuel substitute or for energy production as recycling.

Recycling Plant: a facility where recovered materials are remanufactured into new products.

Redemption Program: a program where consumers are monetarily compensated for the collection of recyclable materials, generally through pre-paid deposits or taxes on beverage containers. In some states or localities (not in South Carolina), legislation has been passed to implement redemption programs to assist in the prevention of roadside litter (bottle bills).

Residential Waste: waste generated by single- multi-family homes including old newspapers, clothing, disposable tableware, food packaging, cans and bottles, food scraps and yard waste. *Excludes* food wastes and yard waste diverted to backyard composting (onsite).

Residues: the materials remaining after processing, incineration, composting, or recycling have been completed. Usually disposed of in a landfill.

Reuse: the use of a product or component of MSW in its original form more than once. Examples include refilling glass or plastic bottles, repairing wood pallets, using corrugated or plastic containers for storage, and returning milk containers.

Scrap Metal Processor: an intermediate operating facility where recovered metal is sorted, cleaned of contaminants, and prepared for final recycling. Examples include scrap metal yards and metal dealers.

Small (Minor) Appliances: many different types, sizes, and styles of electric fans, coffee makers, electric irons, food mixers, etc. Aluminum and plastic are the predominant materials used in small appliances.

Source Reduction: the design, manufacturing, purchase, or use of materials, such as products and packaging, to reduce the amount or toxicity of materials before they enter the MSW management system, such as redesigning products or packaging to reduce the quantity of materials or the toxicity of the materials used; reusing products or packaging already manufactured; and lengthening the life of products to postpone disposal. Examples include donating food to food banks, diverting food scraps and yard waste through backyard (onsite) composting, and reusing plastic pallets. Also referred to as waste prevention.

Telephone Directories: telephone directories printed on paper with high groundwood content. Other directories, such as zip code and area code directories, are included in this category when they are printed on the same type of paper.

Textiles: fibers from discarded apparel, furniture, linens (sheets and towels), and carpets. Examples of recycling include converting apparel and linens into wiper rags and processing textiles into new products (linen paper and carpet padding).

Tin/Steel Cans: tin-coated steel containers such as cans used for food packaging.

Tire Processor: an intermediate operating facility where recovered tires are processed in preparation for recycling.

Tires: passenger car and light- and heavy-duty truck tires. *Excludes* high-speed industrial tires (airplanes), bus tires, motorcycle tires, and special service tires, such as military, agricultural, off-road, and slow-speed industrial tires (from construction vehicles). Examples of recycling include processing car and truck tires into new rubber products (trash cans, storage containers, and rubberized asphalt, tire chips), the combustion of tire chips for fuel, and the use of whole tires for playground and reef construction.

Tree Stumps: the portion of a tree remaining after it has been cut. Tree stumps are categorized as yard waste when found in MSW. Otherwise, tree stumps are generally found in, and categorized as, C&D debris.

Unit-Based Pricing, Pay-As-You-Throw: a system under which residents pay for MSW management services per unit of waste (by weight or volume) collected rather than through a fixed fee.

Used Oil: spent motor oil from passenger cars and trucks that is collected at specified locations for recycling. Used oil is *excluded* from the definition of MSW.

Waste Generation: the amount (weight or volume) of materials and products that enter the waste stream before recycling, composting, landfilling, or combustion takes place.

Waste Stream: the total flow of solid waste from homes, businesses, institutions, and manufacturing plants that must be recycled, incinerated or disposed of in landfills; or any segment thereof, such as the "residential waste stream" or the "recyclable waste stream."

Waste-To-Energy Facility/Combustor: a facility where recovered MSW is converted into a usable form of energy, usually through combustion. SC identifies waste-to-energy activities (not incineration) as recycling.

White Goods: major appliances such as refrigerators, stoves, air conditioners, and washing machines. **See also Major Appliances and Bulky Waste.**

White Ledger Paper: printed or unprinted sheets of white sulphite or sulphate ledger, bond, writing paper, and all other papers which have a similar fiber and filler content.

Wood Packaging: wood products such as pallets, crates, and barrels. *Excludes* wood from furniture and other nonpackaging wood products. Examples of recycling include processing wood into new products (mulch and compost).

Yard Trimmings/Waste: grass, leaves, tree branches and brush, and tree stumps from residential, institutional, and commercial sources. Examples of recycling include processing yard trimmings/waste into compost, mulch, or other similar uses, and landspreading of leaves (when the depth of the application allows for the degradation of the organic plant material).

Yard Trimmings Processor: an intermediate operating facility where recovered yard trimmings/waste are sorted, cleaned of contaminants, and prepared for final recycling.